

TEXAS SPECIFICATION NO. 180-08-01C

(Supersedes Specification No. 180-08-01B)

Effective Date: February 26, 1996

Revised: September 8, 2003

Specification

for

ISOPROPYL ALCOHOL

1. SCOPE: This specification establishes requirements for an anhydrous grade of isopropyl alcohol (also called 2-propanol and isopropanol) for use in the manufacture of liquid cleaning compositions.

2. APPLICABLE SPECIFICATIONS AND STANDARDS: References to specifications, standards, test methods, and other documents shall be to the issues in effect on the date of the Invitation for Bids. Copies of the referenced documents may be obtained from the issuing organizations at the addresses shown. The following documents form a part of this specification to the extent specified herein:

2.1. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM),
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959: www.astm.org.

2.1.1. ASTM D 891 - Standard Test Methods for Specific Gravity, Apparent, of Liquid Industrial Chemicals.

2.1.2. ASTM D 1078- Standard Test Method for Distillation Range of Volatile Organic Liquids.

2.1.3. ASTM D 1209 - Standard Test Method for color of Clear Liquids (Platinum-Cobalt Scale).

2.1.4. ASTM D 1353 - Standard Test Method for Nonvolatile Matter in Volatile Solvents for Use in Paint, Varnish, Lacquer, and Related Products.

2.1.5. ASTM D 1364 - Standard Test Method for Water in Volatile Solvents (Karl Fischer Reagent Titration Method).

2.1.6. ASTM D 1722 - Standard Test Method for Water Miscibility of Water-Soluble Solvents.

2.2. GLOBAL ENGINEERING DOCUMENTS, Customer Support A105, 15 Inverness Way, Englewood, CO 80112, (800) 624-3974, Fax: (303) 792-2192, www.global.ihs.com.

2.2.1. Global Engineering Documents is an information specialist company that maintains and provides standards information for numerous organizations. Copies of standards may also be ordered from Global Engineering Documents.

3. DEFINITIONS: Terminology used in this specification is intended to be generic in nature and consistent with meanings that have been defined through general use and/or accepted trade practices. Where variant meanings may exist, the applicable interpretation shall be determined by the Texas Building and Procurement Commission (TBPC).

3.1. COMMISSION: Texas Building and Procurement Commission (TBPC).

4. REQUIREMENTS: Isopropyl alcohol furnished under this specification shall meet or exceed the following minimum requirements:

4.1. GENERAL REQUIREMENTS: The product shall be a clear, nearly water-white liquid, free from sediment and foreign odor.

4.2. CHEMICAL AND PHYSICAL REQUIREMENTS: The product shall conform to the requirements of Table 1, Chemical and Physical Requirements, when tested by the methods cited in Section 6.

TABLE 1

CHEMICAL AND PHYSICAL REQUIREMENTS

Requirement	Minimum	Maximum	Test
Purity, pbw* isopropyl alcohol	99.70	--	6.1.1.
Specific gravity, 20/20°C	0.7860	0.7870	6.1.2.
Distillation range, °C:			
Initial point	81.30	--	6.1.3.
Dry point	--	83.00	6.1.3.
Water, pbw*	--	0.20	6.1.4.
Color, Pt-Co	--	10.00	6.1.5.
Nonvolatile matter, g/100 ml	--	0.001	6.1.6.
Water miscibility at 1:10 dilution	clear	--	6.1.7.

***pbw = Percent by Weight**

5. SAMPLES: Unless otherwise specified in the Invitation for Bids, no pre-purchase samples shall be required. Samples tested shall be taken from regular orders.

6. TESTING: Testing shall be done by or at the direction of, the Commission and/or the receiving State agency. Tests shall be performed on products from shipments to ordering agencies. In the event products tested fail to meet or exceed all conditions and requirements of this specification, the cost of the samples used and the cost of testing shall be borne by the supplier.

6.1. TESTS: The product furnished under this specification shall be tested by the following methods or approved equally applicable procedures:

6.1.1. Purity: Determine by an applicable gas chromatographic procedure.

6.1.2. Specific gravity: Determine by the procedure of ASTM D 891, except that the constant-temperature bath shall be at $20 \pm 0.1^{\circ}\text{C}$.

6.1.3. Distillation range: Determine by the procedure of ASTM D 1078.

6.1.4. Water: Determine by the procedure of ASTM D 1364.

6.1.5. Color: Determine by the procedure of ASTM D 1209.

6.1.6. Nonvolatile mater: Determine by the procedure of ASTM D 1353.

6.1.7. Water miscibility: Determine by the procedure of ASTM D 1722, in which a sample is examined for clarity after dilution with water to 10 times its original volume.

7. INSPECTION: Products furnished under this specification shall be inspected by, or at the direction of the Commission and/or the ordering State agency either at the destination or place of manufacture.

8. PACKING / PACKAGING: Packing for shipment shall be in accordance with the manufacturer's standard practice and in a manner readily accepted by common carriers engaged in interstate commerce. Within the shipping carton, units shall be packed in a manner designed to minimize damage during the shipment because of rough or improper handling.

8.1. PACKING: The product shall be packaged in tight head metal drums of 55 gallons (208 liters), 360 lbs./drum, capacity, conforming to applicable Department of Transportation requirements. The material of the drum shall neither affect nor be affected by the contents for a period of one year from date of delivery.

9. MARKING / LABELING:

9.1. MARKING: Each shipping container shall be clearly marked with the following:

9.1.1. Name of contents, including brand name, if any.

9.1.2. Quantity contained in pounds and/or kilograms.

9.1.3. Name and address of the manufacturer.

9.1.4. Warning statements as required by governmental regulations. A label on a container of a hazardous chemical must meet the requirements of the most current OSHA standards.

The following information shall either be marked on the container or appear on the shipping documents:

9.1.5. Order number or contract number.

9.1.6. Name and address of ordering agency.

9.1.7. Agency requisition number.

9.2. LABELING: Each container shall bear a durable label containing the name of the product and instructions for use, including required precautionary statements.

10. COMPLIANCE: In order for consideration to be given to the bid on an item under this specification, the bidder must comply with the following:

10.1. PRODUCT IDENTIFICATION: The make, model number, name of the manufacturer, brand or trade name, etc., as applicable, of the item which the vendor proposes to furnish must be stated as part of the bid.

10.2. EXCEPTIONS: Notwithstanding the above, any exception taken by the bidder to the requirements and conditions of this specification must be stated and described in detail as a part of the bid. If no exceptions or deviations are identified in this manner, the items must be furnished exactly as described herein.

10.3. PROOF: The bidder shall bear the burden of proof of compliance with this specification.

10.4. C of A (Certificate of Analysis): A certificate of analysis shall accompany each batch shipped.

10.5. Material Safety Data Sheets (MSDS): All Items must conform to the Texas Hazard Communications Act by being certified as nontoxic or providing an

official MSDS sheet conforming to the requirements of the most current OSHA standards. A copy of the official MSDS sheet for each applicable chemical product must be submitted to each location with each sample, with each initial shipment, and with the first shipment after an MSDS is updated.

11. ORDERING DATA: When ordering products conforming to this specification the requisitioning agency shall specify the following:

11.1. The number of this specification (180-08-01C).

11.2. The total quantity required, in pounds (kilograms).

12. APPROVED PRODUCTS LIST (APL): The Commission will maintain an APL of products that meet or exceed the requirements of this specification. Listing as an approved product shall be required. Additional products meeting the specifications may be submitted and may be considered. Products not on the APL prior to bid advertisement must be evaluated and approved prior to award. The state reserves the option of not considering any product that is not on the APL prior to bid advertisement.

Samples for evaluation must be submitted within 7 working days of request at no cost to the Commission. Location to submit samples will be given at time of request.

12.1. LISTING: To have a product listed on the APL:

12.1.1. First, verify that the product meets or exceeds every requirement of this specification.

12.1.2. Second, submit a written request to the Specifications and Standards Program, Central Procurement Services, that the product be added to the Class 180 APL. Include with your request detailed technical specifications, product literature, and Material Safety Data Sheets (MSDS), addressing all of the requirements.

12.1.3. Last, submit a free sample of the product (usually a pint or a pound) for evaluation. The sample must be labeled with the Manufacturer's Trade Name or Trademark, exactly as the product is marketed.

12.2. EVALUATION: The technical specifications will be evaluated and if found to meet or exceed the requirements, the sample will be tested. If found to be suitable for the intended use, the product will be added to the APL.

12.3. CONTINUED COMPLIANCE: Listing shall not relieve the manufacturer/vendor of providing products meeting each requirement of this specification.

The manufacturer/vendor shall notify the Commission, in writing, of any changes in the product, address, brand name, etc. Failure to do so may result in the removal from the APL.

12.4. REMOVAL/RELISTING: Approved products may be removed for noncompliance, as determined by the Commission, or for failure to provide notification of change. Products may be re-listed in accordance with Paragraph 12.1.

13. PRODUCT INFORMATION: Isopropyl alcohol conforming to this specification is a flammable liquid, and should never be poured or used near an open flame or source of sparks. It can cause drying and roughness of the skin on prolonged contact.

Warning: This product is a known poison: drinking it even in moderate amounts may lead to death. For first aid after ingestion, the patient should be induced to vomit, and a physician's attention should be obtained immediately.

14. AVAILABILITY OF SPECIFICATIONS: Copies of this specification are available [online](#) or may be obtained by calling or writing:

Specifications
Texas Building and Procurement Commission
P.O. Box 13047
Austin, TX 78711-3047
(512) 463-3414